P #5

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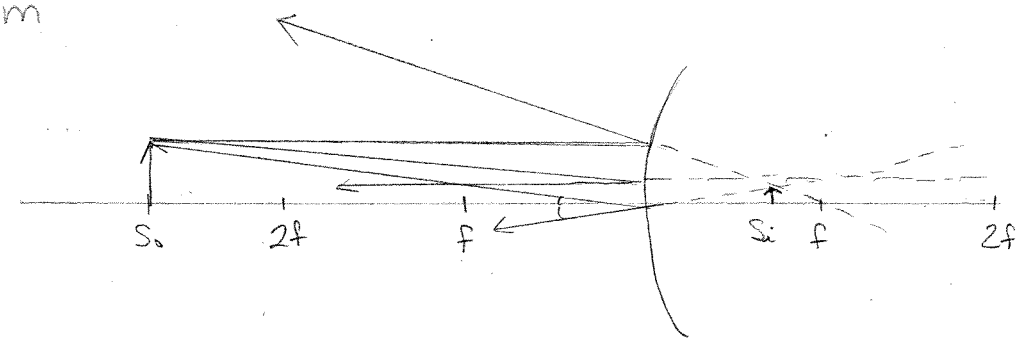
$R = .550\,m$

$f = \frac{R}{2} = \frac{.55\,m}{2}$

$f = -.275\,m$ (Convex mirror)

$S_o = 10.0\,m$



$\frac{1}{S_o} + \frac{1}{S_i} = \frac{1}{f}$

$\frac{1}{10} + \frac{1}{S_i} = \frac{1}{-.275}$

$S_i^{-1} = (-.275)^{-1} - 10^{-1}$

$S_i = -.268\,m$

$m = \frac{-S_i}{S_o}$

$= \frac{-(-.268\,m)}{10\,m}$

$m = .027$

Virtual, Upright